

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014065**Date Inspected:** 05-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr.Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY-1

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) welding of weld joint 20TR2-038-013. Welder is identified as 219188. ZPMC Quality Control (QC) is identified as Mr. Ai wei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U5-F.

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005663.

Magnetic Particle Testing (MT)

This QA Inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Traveler Rail bracket weld Components. Total number of welds MT Tested: 23 No's. The weld designations are

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review as follows:

1. 13TB1-256-002
2. 13TB1-261-002
3. 13TB1-164-002
4. 13TB1-211-002
5. 13TB1-221-002
6. 13TB1-231-002
7. 13TB1-282-002
8. 13TB1-287-002
9. 13TB1-171,172-002
10. 13TB1-183-002
11. 13TB1-108,110,112,114,115,116,117,121,123,124,120,125-002.

During MT this QA Inspector observed 1 (one) Transverse surface linear indication on weld No:13TB1-110-002. This QA informed to ZPMC QC identified as Mr. Ai wei and American Bridge/Fluor (AB/F) QA Inspector identified as Mr. Wang wen bin of this issue. The indication has been ground out and MT re tested found to be acceptable. Refer attached photos for reference.

BAY-2

Submerged Arc Welding (SAW) welding of weld joint FB3205-001-025. Welder is identified as 045265. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-L2c-S-2.

FCAW welding of weld joint FB3227-001-042. Welder is identified as 045209. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

BAY-3

SAW welding of weld joint FB3108-001-006. Welder is identified as 062406. ZPMC Quality Control (QC) is identified as Mr. Zhang Yaxu. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-U3c-S-2.

FCAW welding of weld joint FB3103-001-005. Welder is identified as 206386. ZPMC Quality Control (QC) is identified as Mr. Zhang Yaxu. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

BAY-6

Shielded Metal Arc Welding (SMAW) of weld joint WJF-0-162. Welder is identified as 049769. ZPMC Quality Control (QC) is identified as Mr. Zhao jian Hang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3313-TC-P5.

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SMAW of weld joint WJF-0-071. Welder is identified as 057795. ZPMC Quality Control (QC) is identified as Mr. Zhao jian Hang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3313-TC-P5.

BAY-7

FCAW buttering welding of weld joint 22TR3-001. Welder is identified as 062447. ZPMC Quality Control (QC) is identified as Mr. Wang Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345- FCAW-1G (1F)-Repair-1. The buttering was been performed as per the Critical Welding Repair Report (CWR) No: B-CWR 1374.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer